

I would like to comment on NPRM 04-29 from the perspective of a professional electrical engineer recently retired from Rockwell Collins (formerly Collins Radio and Rockwell International) who has over 40 years experience in RF telecommunications.

Paragraphs 40 and 41 of the NPRM talk about adaptive interference mitigation techniques including notching. The BPL vendors claim that their equipment can avoid amateur frequencies by notching and further eliminate interference by controlling energy levels used to transmit the BPL signals.

These claims do not correlate with my actual experiences. I am located 500 feet from a BPL test site that uses Amperion equipment. Amperion has stated that this equipment has been configured to notch the 20 through 10 meter amateur bands, including WARC bands. They also have set the gains (injection levels) to a lower level than they would like in order to prevent interference. (Note: This test site was activated on March 30, 2004 and continues to operate although I believe all testing has been completed.)

However even with this attempted mitigation, I'm still receiving extremely harmful interference at the S9 (50 microvolt) level on the 20, 17, 15, 12 and 10 meter amateur bands. Additionally I'm receiving S9 interference on the 40 meter amateur band and I have had interference, with other configurations of their system, on the 30 meter band. This interference covers major portions or all of the above amateur bands and is clearly in violation of Part 15 both in radiated signal strength and in creating harmful interference. The strong BPL signals occur just over a KHz apart making communications with anyone but the strongest stations impossible.

Obviously, the claimed mitigation techniques do not work.